

CLAIM OR CLAIMS

1. A capacitive sensor comprising:
 - (a) an elongate first polymeric conductor,
 - (b) an elongate second polymeric conductor; and
 - (c) a non conductive web intermediate the first polymeric conductor and the second polymeric conductor to maintain a substantially fixed separation distance between the first and the second polymeric conductor.
2. The capacitive sensor of Claim 1, wherein at least one of the first and the second polymeric conductors has one of a rectangular, square, circular, triangular, curvilinear or faceted cross section.
3. The capacitive sensor of Claim 1, wherein the first and the second polymeric conductors are directly bonded to the non conductive web.
4. The capacitive sensor of Claim 1, further comprising an auxiliary layer intermediate the first and the second polymeric conductor.
5. The capacitive sensor of Claim 4, wherein the auxiliary layer is one of a conducting and non conducting material.
6. The capacitive sensor of Claim 1, further comprising a weatherseal body connected to one of the first polymeric conductor, the second conductive polymeric conductor and the non conductive web.
7. The capacitive sensor of Claim 1, wherein the first polymeric conductor and the second polymeric conductor are embedded in a non conductive polymer.
8. The capacitive sensor of Claim 1, wherein the non conductive web provides a maximum and minimum separation of the first and second polymeric conductors.
9. The capacitive sensor of Claim 1, further comprising a secondary conductor in at least one of the first polymeric conductor and the second polymeric conductor.
10. The capacitive sensor of Claim 1, wherein the secondary conductor is a wire.
11. The capacitive sensor of Claim 10, wherein the secondary conductor includes a plurality of strands.

12. The capacitive sensor of Claim 1, further comprising a non conductive body embedding the first and second polymeric conductors.

13. The capacitive sensor of Claim 12, wherein the non conductive body has one of a rectangular, square, circular, triangular, curvilinear or faceted cross section.

14. The capacitive sensor of Claim 12, wherein the non conductive body is integral with the web.

15. An elongate capacitive sensor for installation about an opening in a motor vehicle, the opening having at least one corner, the sensor comprising:

(a) a one-piece extruded non conducting body; and

(b) a first polymeric conductor and a second polymeric conductor embedded in the body,

the body configured to substantially maintain a nominal separation distance between the first polymeric conductor and the second polymeric conductor after installation about the corner.

16. The capacitive sensor of Claim 15, wherein the first and the second polymeric conductors have substantially similar cross sectional profiles.

17. The capacitive sensor of Claim 15, wherein the polymeric conductors include a conductor selected from the group consisting of carbon blacks, graphite and metal powder.

18. The capacitive sensor of Claim 15, wherein the body surrounds a cross section of the first polymeric conductor and the second polymeric conductor.

19. The capacitive sensor of Claim 15, wherein at least one of the first and the second polymeric conductor has one of a rectangular, square, circular, triangular, curvilinear or faceted cross section.

20. The capacitive sensor of Claim 15, wherein the first and the second polymeric conductors are directly bonded to the web.

21. The capacitive sensor of Claim 15, further comprising an auxiliary layer intermediate the first and the second polymeric conductor.

22. The capacitive sensor of Claim 21, wherein the auxiliary layer is one of a conducting and non conducting material.

23. The capacitive sensor of Claim 15, wherein body maintains a substantially constant separation distance between the first and second polymeric conductors.

24. The capacitive sensor of Claim 15, further comprising a secondary conductor in at least one of the first polymeric conductor and the second polymeric conductor.

25. The capacitive sensor of Claim 24, wherein the secondary conductor is a wire.

26. The capacitive sensor of Claim 24, wherein the secondary conductor includes a plurality of strands.

27. The capacitive sensor of Claim 15, wherein the body has one of a rectangular, square, circular, triangular, curvilinear or faceted cross section.

28. The capacitive sensor of Claim 15, wherein the body is configured to maintain less than a 10 percent variation in the separation distance along the length of the sensor in the corner.

29. A capacitive sensor, comprising a polymeric conductor embedded within a non conductive polymeric body, a cross sectional periphery of the polymeric conductor substantially defined by the body.

29. The capacitive sensor of Claim 28, wherein the polymeric body defines at least a portion of a weatherseal.

30. A method manufacturing a capacitive sensor for installation about a motor vehicle opening having at least one corner, the method comprising forming a non conductive web intermediate a first polymeric conductor and a second polymeric conductor to define a separation distance between the first and the second polymeric conductor, the web configured to substantially maintain the separation distance upon installation about the corner.

31. The method of Claim 30, further comprising maintaining the separation distance after installation to within 10 percent of the separation distance before installation.

32. The method of Claim 30, further comprising maintaining the separation distance after installation about a corner having a radius less than 45 mm to within 10 percent of the separation distance before installation.

33. A capacitive sensor comprising:

(a) an elongate first polymeric conductor,

(b) an elongate second polymeric conductor; and

(c) a non conductive web intermediate the first and the second polymeric conductor, the web and the first and the second polymeric conductor defining a radius of curvature and the web maintaining a substantially fixed separation distance between the first and the second polymeric conductor along the radius of curvature.

34. The capacitive sensor of Claim 33, wherein the web maintains the separation distance to within 10 percent of a nominal separation distance.

35. The capacitive sensor of Claim 33, further comprising a polymeric body at least partially surrounding one of the polymeric conductors, the web being a harder material than the body.

36. The capacitive sensor of Claim 33, wherein the radius of curvature is less than 35mm.